



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

5

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/980,006	05/09/2002	Jan Hall	21547/0283	9722

7590 11/29/2004

Burton A Amernick
Connolly Bove Lodge & Hutz
PO Box 19088
Washington, DC 20036-0088

EXAMINER

ROBERT, EDUARDO C

ART UNIT	PAPER NUMBER
----------	--------------

3732

DATE MAILED: 11/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/980,006

Applicant(s)

HALL ET AL.

Examiner

Eduardo C. Robert

Art Unit

3732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 16-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15, 19 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 May 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Group I, i.e. claims 1-15, 19 and 20, in the reply filed on September 17, 2004 is acknowledged.

Claims 16-18 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Election was made **without** traverse in the reply filed on September 17, 2004.

Drawings

The drawings are objected to because Figures 1-3 are not clear and one can not understand what they show. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will

Art Unit: 3732

be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The abstract of the disclosure is objected to because it contains "said". Correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-15, 19, and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete errors such as:

Art Unit: 3732

In claim 1 exits an inconsistency between the language in the preamble and that of the body of the claim, thus making the scope of the claim unclear. In the preamble, line 1, applicant recites "Layer" with the bone or tissue structure being only functionally recited, i.e. "which can be arranged on an implant .. for bone or tissue structure", thus indicating that the claim is directed to the subcombination, "Layer". However, in lines 9-10, applicant positively recites the structure as part of the invention, i.e. "mouths ... which face towards the structure", thus indicating that the combination, Layer and tissue structure, is being claimed. As such, it is unclear whether applicant intends to claim the subcombination or combination. Since claiming the combination of the Layer and tissue structure makes such claim(s) directed to non-statutory subject matter, applicant should amend the claims so as to remove all positive recitations of the tissue structure. As such, the claim(s) would be directed to the subcombination, Layer, and will be considered as such for examination purposes.

In claim 2, line 1, "Implant layer" lacks a prior antecedent. The term "Implant layer" should be changed to --Layer --. In claim 1, "Patent" should be deleted since the claim is not actually patented. In line 4, "the greater part" lacks a prior antecedent. In line 6, "the transition" and "the body" each lacks a prior antecedent.

In claim 3, line 1, "Implant layer" lacks a prior antecedent. The term "Implant layer" should be changed to -- Layer --. In claim 1, "Patent" should be deleted since the claim is not actually patented. In line 3, "the depth direction" and "the radial direction" each lacks a prior antecedent.

In claim 4, line 1, "Implant layer" lacks a prior antecedent. The term "Implant layer" should be changed to -- Layer --. In claim 1, "Patent" should be deleted since the claim is not

Art Unit: 3732

actually patented. In line 2, "it" is indefinite because it is unclear to what applicant is referring to, e.g. the layer, or implant, or surface, etc. Furthermore, in line 3, "the start" and in line 4, "the layer volume" each lacks a prior antecedent.

In claim 5, line 1, "Implant layer" lacks a prior antecedent. The term "Implant layer" should be changed to -- Layer --. In claim 1, "Patent" should be deleted since the claim is not actually patented. In line 2, "it" is indefinite because it is unclear to what applicant is referring to, e.g. the layer, or implant, etc.

In claim 6, line 1, "Implant layer" lacks a prior antecedent. The term "Implant layer" should be changed to -- Layer --. In claim 1, "Patent" should be deleted since the claim is not actually patented. Furthermore, claim 6 has a problem similar to the one of claim 1 (combination/subcombination) and would be treated in a similar fashion.

In claim 7, line 1, "Implant layer" lacks a prior antecedent. The term "Implant layer" should be changed to -- Layer --. In claim 1, "Patent" should be deleted since the claim is not actually patented. Furthermore, in lines 2 and 3, applicant recites a narrow numerical range that fall within a broader range and this is indefinite because the boundaries of the claim are not discernible, i.e. the metes and bounds of the claim are not clearly set forth. (see MPEP 2173.05(c)).

In claim 8, line 1, "Implant layer" lacks a prior antecedent. The term "Implant layer" should be changed to -- Layer --. In claim 1, "Patent" should be deleted since the claim is not actually patented. In line 2, "the oxide layer" lacks prior antecedent. Furthermore, in this claim it is unclear to what applicant is taking about when combined with the subject matter of claim 1.

Art Unit: 3732

In claim 9, line 1, "Implant layer" lacks a prior antecedent. The term "Implant layer" should be changed to -- Layer --. In claim 1, "Patent" should be deleted since the claim is not actually patented. In line 2, "the oxide layer" lacks prior antecedent. Furthermore, in this claim it is unclear to what applicant is taking about when combined with the subject matter of claim 1.

In claim 10, line 1, "Implant layer" lacks a prior antecedent. The term "Implant layer" should be changed to -- Layer --. In claim 1, "Patent" should be deleted since the claim is not actually patented. In line 2, "each surface" is indefinite because it appears that applicant talks about more than one surface, when claim 1 recites only one surface.

In claim 11, line 1, "Implant layer" lacks a prior antecedent. The term "Implant layer" should be changed to -- Layer --. In claim 1, "Patent" should be deleted since the claim is not actually patented.

In claim 12, line 1, "Implant layer" lacks a prior antecedent. The term "Implant layer" should be changed to -- Layer --. In claim 1, "Patent" should be deleted since the claim is not actually patented. In line 2, "the jaw bone" lacks a prior antecedent.

In claim 13, line 1, "Implant layer" lacks a prior antecedent. The term "Implant layer" should be changed to -- Layer --. In claim 1, "Patent" should be deleted since the claim is not actually patented.

In claim 14, line 1, "Implant layer" lacks a prior antecedent. The term "Implant layer" should be changed to -- Layer --. In claim 1, "Patent" should be deleted since the claim is not actually patented. In line 2, "the agent", "the substance" and "the depot" each lacks a prior antecedent.

Art Unit: 3732

Claim 15 has a problem similar to the one of claim 1, i.e. combination/subcombination. Also, in line 3, "the body" lacks a prior antecedent. In lines 11 and 13, "the surface" and "said surface" each lacks a prior antecedent.

In claim 19, line 1, "Implant layer" lacks a prior antecedent. The term "Implant layer" should be changed to -- Layer --. In claim 1, "Patent" should be deleted since the claim is not actually patented. In line 3, "the depth direction" and "the radial direction" each lacks a prior antecedent.

In claim 20, line 1, "Implant layer" lacks a prior antecedent. The term "Implant layer" should be changed to -- Layer --. In claim 1, "Patent" should be deleted since the claim is not actually patented. In line 2, "it" is indefinite because it is unclear to what applicant is referring to, e.g. the layer, or the implant, etc. In lines 3 and 4, "the start" and "the layer volume" each lacks a prior antecedent.

Applicant is advised to carefully reread the claims and correct all errors found therein.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-9, 12-15, 19, and 20, as understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Hahn (U.S. Patent No. 3,605,123).

Art Unit: 3732

Hahn discloses a layer, e.g. 13 or 22, 32. The layer has a channel network with a porosity (see Figures 1-4). The channel network includes mouth which are adapted to face a bone structure (see for example Figures 2 and 3). As disclosed, the mouth cross section diameter are less than the an extends of the channel (see Figures 2 and 3). The channel network includes channel branches through the layer extending in all directions. The layer has a thickness up to 0.1 inch. It is noted that the range of 0.5-20 micrometers is within the range of Hahn. Hahn disclosed that the layer can be used on an implant, as shown in Figure 1, or could in any prosthetic device including anchoring element for attaching a teeth to a jawbone (see col. 5, lines 46-50). With regard the statement of intended use and other functional statements, they do not impose any structural limitations on the claims distinguishable over Hahn which is capable of being used as claimed if one so desires to do so. *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Furthermore, the law of anticipation does not require that the reference "teach" what the subject patent teaches, but rather it is only necessary that the claims under attack "read on" something in the reference. *Kalman v. Kimberly Clark Corp.*, 218 USPQ 781 (CCPA 1983). Furthermore, the manner in which a device is intended to be employed does not differentiate the claimed apparatus from prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 3732

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10 and 11, as understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Hahn (U.S. Patent No. 3,605,123).

Hahn discloses the claimed invention except for the diameter of the mouth being 0.1-10 micrometers (claim 10), the layer being of a titanium oxide (claim 11). With regard to claim 10, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the layer of Hahn with the diameter of the mouth being in the range of 0.1-10 micrometers, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233. With regard to claim 11, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the layer of Hahn from titanium oxide, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Conclusion

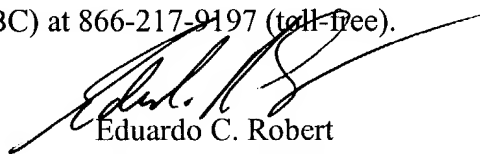
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892 for art cited of interest.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eduardo C. Robert whose telephone number is 571-272-4719. The examiner can normally be reached on Monday-Friday, 9:30am-6:00pm.

Art Unit: 3732

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin P. Shaver can be reached on 571-273-4720. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Eduardo C. Robert
Primary Examiner
Art Unit 3732

E.C.R.